(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 3 February 2005 (03.02.2005)

(10) International Publication Number WO 2005/009962 A1

(51) International Patent Classification7: 403/02, 417/02, A61K 31/38, 31/44

C07D 213/02,

(21) International Application Number:

PCT/US2004/021888

(22) International Filing Date:

9 July 2004 (09.07.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/487,316

15 July 2003 (15.07.2003) US

- (71) Applicant (for all designated States except US): MERCK & CO., INC. [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BELL, Ian, M. [GB/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US). GALLICCHIO, Steven, N. [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US). ZARTMAN, C. Blair [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US).
- (74) Common Representative: MERCK & CO., INC.; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US).

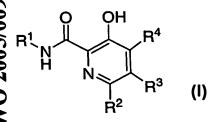
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, HL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: HYDROXYPYRIDINE CGRP RECEPTOR ANTAGONISTS



(57) Abstract: The present invention is directed to compounds of Formula I: I (where variables R1, R2, R3 and R4 are as defined herein) useful as antagonists of CGRP receptors and useful in the treatment or prevention of diseases in which CGRP is involved, such as headache, migraine and cluster headache. The invention is also directed to the use of such compounds as ligands of AM receptors for the treatment or prevention of diseases in which AM is involved, such as cancer. The invention is further directed to pharmaceutical compositions comprising these compounds and the use of these compounds and compositions in the prevention or treatment of such diseases in which CGRP and/or AM are involved.